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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,650	12/16/2003	James Wong	SUPERCON 23	5354

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EXAMINER

NGUYEN, DONGHAI D

ART UNIT PAPER NUMBER

3729

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/736,650	Applicant(s) WONG, JAMES	
	Examiner Donghai D. Nguyen	Art Unit 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/17/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 17 January 2006 has been considered and made of record.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,869,196 to Wong et al.

Regarding claims 1 and 12, Wong et al disclose a process for making superconducting material useful for forming electrolytic devices comprising the steps of: a) establishing multiple niobium or tantalum components (2) in a primary billet of a ductile material (3 see Fig. 1); b) working the primary billet to a series of reduction steps to form said niobium or tantalum components into elongated elements (Col. 5, lines 35-50); c) cutting the elongated elements from step b) and forming the cut elements in to a stack around a metal core (5, see Fig. 3a); d) surrounding the stack of the cut elements from step c) with a porous confining layer (6/7) to form a secondary billet (Figs. 3a-c); e) working the secondary billet from step d) through a series of reduction steps (Col. 6, lines 1-6); including twisting and rolling into thin ribbon (17) with an Aspect Ratio of greater than 5:1 (Col. 8, lines 49-50 details the aspect ratio is greater than or equal to 2:1 meaning the Aspect ration is from 2:1 to 40:1 or even greater); f) cutting the worked

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billet from step e) into sections (Col. 6, lines 11-19); and g) leaching the core and sheath at least in part (Col. 6, lines 36-38).

Regarding claims 2-4, Wong et al disclose the leaching is in an acid leach (Col. 6, line 20); in a liquid metal bath comprises molten magnesium (Col. 9, line 48).

Regarding claims 5, see Fig. 3b.

Regarding claim 6, see Fig. 3c.

Regarding claim 7, Wong et al disclose several separate segments are used to construct a multi anode capacitor assembly (See Col. 6, lines 48-49).

Regarding claims 10 and 11, Wong et al disclose the metal core (5 or 15) is a single metal rod (see Figs. 3a, 6b and 7) having a cross sectional area not exceeding 20% of said second billet before working (Note the diameter of the rod is 2.54 cm and the diameter of the billet is 17.3 cm, therefore the cross sectional area of the core is less than 20% of the second billet area, see Col. 15, line 58 to Col. 16, line 5).

The limitation of claim 12 also met as set forth above.

4. Claims 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Wong et al.

Regarding product by process claims 8 and 9 of the present invention, Wong disclose an electronic device/electrolytic capacitor (Fig. 4b) is made from the superconductor material (see Col. 4, line 1). Further, Applicant is referred to MPEP section 2113.

Response to Arguments

5. Applicant's arguments filed 17 January 2006 have been fully considered but they are not persuasive. Applicant argues that Wong et al do not teach the claimed invention. The Examiner disagrees because Wong et al disclose every aspect limitations of claim 1 including the aspect ratio of about 5:1 as recited in the rejected claims. Applicant suggests going to Col. 8, lines 45-50 of Wong for this teaching of forming the ribbon (17) having an aspect ratio ranging from 2:1 to 40:1. Therefore, the rejections based on Wong et al are considered to be valid.

6. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghai D. Nguyen whose telephone number is (571)-272-4566. The examiner can normally be reached on Monday-Friday (9:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (571)-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN
March 13, 2006


MINH TRINH
PRIMARY EXAMINER